BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

PERIODIC REPORTING
(PROPOSAL SIX)

Docket No. RM2017-10

RESPONSES OF THE UNITED STATES POSTAL SERVICE
TO QUESTIONS 1-13 OF CHAIRMAN'S INFORMATION REQUEST NO. 1
(August 30, 2017)

The United States Postal Service hereby provides its response to

Questions 1-13 of Chairman's Information Request No. 1, issued August 23, 2017. The

questions are stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorney:

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August 30, 2017

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1. Please provide revised Excel files "PROP.SIX.USPS-FY16-NP15.xlsx" and
"PROP.SIX.USPS-FY16-NP16.xlsx" that are properly linked and sourced for cells
that contain hard-coded values. For cells where it would be difficult to link to
source data, please provide detailed source information in source notes that
include the file and tab names and cell references.

RESPONSE:

The mail processing and transportation cost models, with links established to source

data, can be found in the files 'Prop.6.ChIR.1.NP15.xlsx' and 'Prop.6.ChIR.1.NP16.xlsx',

respectively, in USPS-RM2017-10/NP2. Some slight discrepancies were discovered in

the linking process and have been corrected.

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2.　　[Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP15.xlsx."] Please refer to the Petition, Proposal Six at 2 and the worksheet titled "PS Data."

　　a.　　Please provide the source file described in cell A2 of the worksheet titled "'PS Data."

　　b.　　Please provide the calculations for the data found in cells B42, B43, C42, and C43.

RESPONSE:

(a) The source file that contains the FY 2016 Parcel Select volume, cubic feet, and weight data can be found in the file 'Parcel.Select.Data.xlsx' in USPS-RM2017-10/NP2.

(b) The figures in cells B42, B43, C42, and C43 represent the percentage of machinable mail that is processed in manual operations at the network distribution centers (NDC), rather than being processed on the Parcel Sorting Machines (PSM), due to the weight of the mail piece. Generally speaking, parcels weighing over 20 pounds are not processed on the PSMs, even though the machine can handle parcels weighing up to 35 lbs. The calculations are performed using data from the file 'Parcel.Select.Data.xlsx' in USPS-RM2017-10/NP2.

There are machinable DNDC prices for mail pieces weighing up to 35 pounds in the Price List. The calculation in cell C42 is equal to the volume of machinable DNDC mail pieces weighing 20 pounds or less divided by the total DNDC machinable mail pieces. The calculation in cell C43 is equal to the volume of machinable DNDC mail pieces weighing over 20 pounds divided by the total DNDC machinable mail pieces.

The Price list does not contain distinct machinable and nonmachinable Ground prices. In order to be consistent with how ONDC and NDC presort volumes have been incorporated into the Ground volume elsewhere in the cost model, the calculation in cell B42 is equal to the volume of Ground, ONDC, and NDC presort mail pieces weighing 20 pounds or less divided by the volume of Ground, ONDC, and NDC mail pieces weighing 35 pounds or less. The calculation in cell B43 is equal to the volume of Ground, ONDC, and NDC presort mail pieces weighing 21 to 35 pounds divided by the volume of Ground, ONDC, and NDC presort mail pieces weighing 35 pounds or less.

These calculations represent an additional minor modification to the mail processing cost model that probably merited mention in the original Proposal Six Petition. The percentages in cells B42, B43, C42, and C43 were previously estimated using volume data for parcels weighing 70 pounds or less. Parcels that weigh over 35 pounds, however, are likely to be nonmachinable. A more accurate estimate of the percentage of machinable mail pieces that end up being processed manually, despite the fact that they could technically be sorted on a PSM, can be obtained by limiting the calculations to the parcels that weigh 35 pounds or less.

3.   [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017,
Excel file "PROP.SIX.USPS-FY16-NP15.xlsx."]   Please refer to the Petition,
Proposal Six at 2 and the worksheet titled "Volumes". Please explain why ONDC
and NDC presort volumes were incorporated into the Ground volume in the
"Volumes" worksheet.

RESPONSE:

The mail processing unit cost by shape estimate in the 'Cost Pool Data' worksheet in

the mail processing cost model has historically been calculated using the Revenue,

Pieces, and Weights (RPW) Parcel Select volume reported in the Cost and Revenue

Analysis (CRA). The Parcel Select volume contained in the 'Volumes' worksheet in the

mail processing cost model has historically been equal to the RPW Parcel Select

volume reported in the CRA.

The ONDC and NDC presort volumes were incorporated into the Ground volume so that

the total Parcel Select volume contained in the 'Volumes' worksheet would match that

shown in the CRA. In addition, these volumes were included in the mail processing cost

model to reflect the fact that the ONDC and NDC presort mail pieces did incur costs in

FY 2016, even though the cost estimates are not identical to those filed in Docket No.

ACR2016.

Due to the relatively small volume of ONDC and NDC presort mail pieces in FY 2016,

the impact to the mail processing unit cost estimates in the 'Summary' worksheet would

not be significant if the volumes for those price categories were to be removed from cell

B16 in the 'Volumes' worksheet. In all cases, the impact to the mail processing unit cost estimates would be less than one cent, and in the vast majority of cases the impact would be much less than one cent. It should also be noted that this issue will not exist in Docket No. ACR2017 because the ONDC and NDC presort price categories no longer exist. Consequently, no ONDC and NDC presort volumes will be reported in RPW and the CRA in FY 2017.

4.   [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP15.xlsx."] Please explain why the data used to determine Intra-NDC/Inter-NDC Percentages in cells B28:B29 from the "PS Data" worksheet do not include NDC Presort volume and do not comprise the total ground volume shown on the "Volumes" worksheet, cell B16.

RESPONSE:

The data included in cells B28 and B29 in the 'PS Data' worksheet have historically come from the Parcel Select volume, cubic feet, and weight dataset contained in the file 'Parcel.Select.Data.xlsx' in USPS-RM2017-10/NP2. Those data, however, do not include the negotiated service agreement (NSA) volumes. In order to be consistent with how the ONDC and NDC presort volumes were treated in the 'Volumes' worksheet, the volume data in cells B28 and B29 also should have included volume data for those two price categories.

The volume distribution by weight increment and zone in the 'PS Ground Vol' worksheet in the transportation cost model in workbook 'Prop.6.ChIR.1.NP16' does include the NSA, ONDC, and NDC presort volumes. The calculations in cells B28 and B29 of the mail processing cost model are now performed using data from the 'PS Ground Vol' worksheet and 'Volumes' worksheet in the transportation cost model. The total volume shown in cell B30 in the 'PS Data' worksheet in the mail processing cost model now matches that shown in cell B16 in the 'Volumes' worksheet in that same model.

5.   [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017,
Excel file "PROP.SIX.USPS-FY16-NP15.xlsx."] Please refer to the worksheet
titled "PRS Storage Sum." Please identify where storage cost estimates are
used in Excel file "PROP.SIX.USPS-FY16-NP15.xlsx."

RESPONSE:

The storage cost estimates in the 'PRS Storage Sum' worksheet in the mail processing

cost model have been included in the PRS cost study since it was first presented in

Docket No. RM2003-2. These costs are not used to perform any additional calculations

within the mail processing cost model. In addition, they no longer serve any pricing

purpose. Consequently, the 'PRS Storage Sum' worksheet can be deleted from the

mail processing cost model and the cost per square foot input value can be removed

from the 'Other Inputs' worksheet. These changes have been made to the mail

processing cost model file 'Prop.6.ChIR.1.NP15.xlsx' in USPS-RM2017-10/NP2. The

page numbers (corresponding to and appearing in the header of each tab, and

indicating the position of each tab in the sequence) have been revised accordingly, and

the citations have been revised to reflect the new page numbers.

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6. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the worksheet titled "Cost Dist PS," cells B19, C20, and B23. Please discuss on what basis these assumptions were made and provide the analysis used to develop the values in the referenced cells.

RESPONSE:

These assumptions remain unchanged from the current approved methodology. Cells B19 and C20 refer to the average number of local and intermediate legs of transportation for a DNDC parcel, respectively. DNDC parcels are assumed to receive one leg of intermediate transportation from the destination NDC to the destination SCF, and one leg of local transportation from the destination SCF to the destination DU. Cell B23 refers to the average number of local legs of transportation for a DSCF parcel. DSCF parcels are assumed to receive one leg of local transportation from the destination SCF to the destination DU.

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7. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the worksheet titled "Cost Dist PRS," cells B12, C13, and B16. Please discuss on what basis these assumptions were made and provide the analysis used to develop the values in the referenced cells.

RESPONSE:

In both the mail processing and transportation cost models, it is assumed the return customer enters the Full Network PRS mail piece at a nearby delivery unit. Cells B12 and C13 refer to the average number of local and intermediate legs of transportation for a Full Network parcel, respectively. Full Network parcels are assumed to incur a leg of local transportation from the origin DU to the origin SCF, a leg of intermediate transportation from the origin SCF to the origin NDC, a leg of intermediate transportation from the destination NDC to the destination SCF, and a leg of local transportation from the destination SCF to the destination DU. Cell B16 refers to the average number of local legs traveled by a RSCF parcel. RSCF parcels are assumed to incur one leg of local transportation from the origin DU to the origin SCF.

8. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the worksheet titled "CFM By Zone," cells B7:C13. Please discuss how the data in these cells were developed and provide the source(s) file for the data in these cells.

RESPONSE:

The source file can be found in the file 'Parcel.Select.Data.xlsx' in USPS-RM2017-10/NP2. Estimates of cubic foot miles are calculated as the product of cubic-feet estimates and a measure of non-local transportation mileage. Local transportation is defined as any transportation within a SCF service territory. Consequently, DSCF and DDU volumes will have zero cubic foot miles.

The first step in computing cubic foot miles is to develop a matrix showing the mileage between any two 3-digit ZIP codes. The specific location for each 3-digit ZIP code is the longitude and latitude of the primary Postal Service facility in that ZIP code as reported in the Postal Service's cross reference file. Using these longitude and latitude coordinates, mileage is computed using the great circle distance formula for an ordinary sphere.

For non-destination-entry, non-permit-imprint parcels, the ODIS-RPW sample record contains the originating and destinating 3-digit ZIP codes. Using the mileage matrix, the miles that the sampled piece traveled are added to the record. As volumes and cubic feet are summed, average miles are computed for each weight-step and zone

combination. A similar set of average miles cannot be computed for permit-imprint pieces since the origin ZIP is not known. The non-permit imprint average miles by zone are applied to permit-imprint pieces as well. Cubic foot miles are computed as the product of the cubic feet estimate for a zone and weight step and the average miles for that zone. For destination entry parcels, as noted above, DSCF and DDU parcels have zero mileage. The non-permit imprint average miles by zone and weight step are used to distribute DNDC pieces.

9.   [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017,
Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."]   Please refer to the worksheet
titled "Regression Inputs," cell C81. Please explain why the value of this cell is
different than cell C81 in the worksheet titled "Regression Inputs" in the Excel file
"USPS-FY16-NP16.xlsx" from Docket No. ACR2016, Library Reference USPS-
FY16-NP16.[1]

RESPONSE:

The value in Cell C81 in the 'Regression Inputs' worksheet in the file 'PROP.SIX.USPS-

FY16-NP16.xlsx' was incorrect. This error has been corrected in the transportation cost

model file 'Prop.6.ChIR.1.NP16.xlsx' in USPS-RM2017-10/NP2.

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[1] Docket No. ACR2016, USPS-FY16-NP16, December 29, 2016, Excel file "USPS-FY-
NP16.xlsx."

10. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to Library Reference USPS-RM2017-10/NP1, Excel file "PROP.SIX.DATA.xlsx," worksheet titled "TRACS LONG DISTANCE."

Please explain how the values in cells B17:E18 were calculated and provide the source(s) used to determine them.

RESPONSE:

These values were calculated using TRACS data from FY16 and a mapping of NDCs to the 3-digit ZIPs they service. As background, for each mail piece recorded on a TRACS surface test, the origin facility where that mail piece was loaded onto the sampled vehicle is recorded. The destination facility where the mail piece was unloaded from the sampled vehicle is also known since the TRACS tests are conducted at the destination facility.

First, the 3-digit ZIPs of the origin and destination facilities are used to map each facility to the NDC that services it. The origin and destination facilities for one particular mail piece may be located within the same NDC service area or in two different NDC service areas. If the mail piece is loaded onto the sampled vehicle in one NDC service area and unloaded in a different NDC service area, then this is considered to be long-distance. The methodology above was used to flag each Parcel Select mail piece recorded in TRACS as either long-distance or not long-distance.

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Once each Parcel Select mail piece was identified as either long-distance or not long-distance, the same expansion process used to calculate the estimated cubic-foot-miles for the TRACS distribution keys[2] was used to calculate the estimated cubic-foot-miles for the long-distance Parcel Select pieces and the non-long-distance Parcel Select pieces. Essentially, long-distance Parcel Select and non-long-distance Parcel Select were treated as two separate mail categories in this expansion.

Finally, using the estimated cubic-foot-miles for long-distance Parcel Select and non-long-distance Parcel Select, the proportion of cubic-foot-miles for each category was calculated for each mode.

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[2] USPS-FY16-36

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11. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the Petition, Proposal Six at 6, 7.

    a. Please discuss how the proposed method for classifying long-distance transportation legs improves upon the current methodology.

    b. Please provide data comparing actual or estimated lengths of local, intermediate, and long distance transportation legs under the current and proposed methods.

RESPONSE:

(a) The current methodology classifies a percentage of the Inter-NDC cost as long-distance based on the number of stop-days at NDC facilities versus non-NDC facilities. The current assumption is that the proportion of stop-days occurring at NDCs is a good proxy for the proportion of Inter-NDC costs that are long-distance. This assumption does not take into account that having a stop at an NDC facility does not imply that any mail (or any Parcel Select mail) was unloaded at that NDC. It also does not take into account that stops at non-NDC facilities may still be long-distance. One alternative considered was the proportion of Parcel Select mail unloaded at NDC facilities versus non-NDC facilities. However, this still does not take into account that stops at non-NDC facilities may be long-distance. Therefore, a better proxy for identifying long-distance costs can be derived from the number of pieces that originate and destinate in different NDC service areas. Highway transportation costs, in general, are distributed to each product according to the proportion of cubic-foot-miles by mail category. Therefore, to align with this accepted methodology, the proportion of cubic-foot-miles is used to distribute the Parcel Select costs between the long-distance (different NDC service

areas) and non-long-distance (within NDC service area) categories. In addition, the

Intra-SCF, Inter-SCF, and Intra-NDC contract types were assumed to have no long

distance component. Under the proposed methodology, the costs for these contract

types can be identified as long-distance where appropriate. Overall, the proposed

methodology more accurately reflects the operational realities of transporting Parcel

Select mail, and it is based on empirical data that can be updated regularly, rather than

on fixed assumptions.

(b) An average number of miles traveled by Parcel Select pieces on local, intermediate,

and long distance transportation legs under the current and proposed methods are

presented below.

Under the current methodology, all Intra-SCF Parcel Select costs are local, and all Inter-

SCF and Intra-NDC costs are intermediate. The first chart below shows the average

number of miles traveled for Parcel Select pieces recorded in TRACS for each of these

three contract types. For Inter-NDC the average number of miles traveled by Parcel

Select pieces unloaded at NDC facilities (long distance) versus unloaded at non-NDC

facilities (intermediate).

Current Method – Average Miles Traveled by Parcel Select Pieces

	IntraSCF*	InterSCF	IntraNDC	InterNDC
Local	1	N/A	N/A	N/A
Intermediate	N/A	97.2	148.8	162.5
Long Distance	N/A	N/A	N/A	449.1

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Proposed Method – Average Miles Traveled by Parcel Select Pieces

	IntraSCF*	InterSCF	IntraNDC	InterNDC
Local	1	N/A	N/A	N/A
Intermediate	N/A	51.5	128.2	31.1
Long Distance	1	259.2	361.6	580.2

*As documented in USPS-FY16-36, given the difficulties of maintaining highway mileage files for the very large number of Intra-SCF routes and stops, the distance component of the distribution key is set to one mile for each sampled stop-day for Intra-SCF.

12. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the Petition, Proposal Six at 7. The Postal Service states that in the previous version of the cost model "[t]he number of DDU local transportation legs was based on a Docket. No. R2000-1 figure." Please explain why the proposed method for estimating DDU local transportation legs is an improvement.

RESPONSE:

The proposed method for estimating DDU local transportation legs is an improvement over the current methodology because it is based on empirical data which can be updated on an annual basis, rather than on a fixed assumption. The current methodology is based on an assumption that DDU parcels avoid all Intra-SCF van and trailer costs, but do not avoid intra-city and box route costs. The proposed method takes advantage of PTR data, which were not available when the current methodology was originally proposed, to identify the price category of Parcel Select pieces that were actually found on each transportation mode, including local transportation legs. This change to the methodology more accurately reflects the operational realities of transporting Parcel Select mail, and it is based on empirical data that can be updated regularly rather than on fixed assumptions.

13. [Please refer to the Library Reference USPS-RM2017-10/NP1, July 28, 2017, Excel file "PROP.SIX.USPS-FY16-NP16.xlsx."] Please refer to the Petition, Proposal Six at 7, 8. The methodological changes proposed by the Postal Service rely upon the classification of parcel piece-legs into "expected" and "unexpected" categories.

    a.   Please confirm that this classification is not used elsewhere by the Postal Service.

        i.   If confirmed, please indicate whether the Postal Service conducted any analyses supporting the need for this classification. If so, please provide the details of such analyses, including source data and output.

        ii.   If confirmed, please also discuss any other alternative methods that were considered by the Postal Service.

        iii.   If not confirmed, please discuss where the Postal Service has applied this classification.

    b.   Please define transportation "piece-legs" and provide examples of "unexpected piece-legs" and "expected piece-legs."

    c.   Please confirm that local piece legs for DNDC and DSCF parcels and intermediate piece legs for DNDC parcels are never "unexpected" in the cost model.

        i.   If confirmed, please provide the basis upon which the Postal Service makes this assumption and discuss any efforts that have been made to incorporate these types of unexpected piece-legs into the cost model.

        ii.   If not confirmed, please explain where the model accounts for these unexpected piece-legs.

RESPONSE:

(a) Confirmed.

(a)i. This classification is necessary in order to calculate the true transportation costs incurred by destination entry pieces. If this distinction between 'unexpected' and 'expected' transportation piece-legs is not made, then only the transportation costs for

the expected transportation legs will be included. The transportation costs for the unexpected transportation legs would always be assumed to be zero, as under the current methodology. The analysis filed with Proposal Six invalidates this assumption, since destination-entry parcels were identified on these unexpected legs of transportation during TRACS tests.

(a)ii. Alternative methods were not considered.

(a)iii. Not applicable.

(b) A "piece-leg" is defined as one mail piece traveling on one leg of transportation. For example, if one mail piece travels on two legs of transportation, this would be two piece-legs. If two mail pieces travel on one leg of transportation, this would also be two piece-legs. An example of an unexpected piece-leg is a DDU parcel traveling on one leg of long-distance transportation. DDU parcels should not incur long-distance transportation, so this is 'unexpected'. An example of an expected piece-leg is a DSCF parcel traveling on one leg of local transportation from the destination SCF to the destination DU.

(c) Confirmed.

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(c)i. The Postal Service has maintained the assumption from the previous cost model that DNDC and DSCF pieces receive one leg of local transportation. TRACS is not able to provide an estimate of the small percentage of additional unexpected legs on a transportation mode for price categories where that transportation mode is already expected to occur frequently.

(c)ii. Not applicable.